Lab 1: R Fundamentals 1

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Eco 602 Lab

c\_1= c(1,2,3)

c\_1

c\_2= "c (1,2,3)"

c\_2

#Q1: The outputs are different because c\_2 is a string.

#Q2&3: c\_1 is a function because it does not have quotation marks and c\_2 is a variable because it does have the quotation marks.

#Q4: The values are different because the "" read as a string so it does not complete an action.

my\_vec= 1:3

mat\_1=matrix(my\_vec)

mat\_1

#Q5: The dimensions of the matrix are 3 rows and 1 column.

#Q6: The R code to retrieve the element of mat\_1 that has a value of 3 is mat\_1==3. This shows what values are 3 using TRUE and FALSE.

mat\_1== 3

mat\_1[3]

#Q7

mat\_2= matrix(my\_vec, nrow= 2, ncol=3)

mat\_2

#Q8

mat\_3= matrix(my\_vec, nrow=3, ncol=2)

mat\_3

#Q9: R uses the columns to recycle the values in my\_vec

#Q10:

mat\_4= matrix(my\_vec, nrow= 2, ncol=4)

mat\_4

#Q11: I changed my rows to 2 and the columns to 4. This gave me an warning message but I was able to create a matrix that is not a multiple of 3.

#Q12

my\_list\_1= list(5.2, "five point two",0:5)

my\_list\_1

names(my\_list\_1)= c("two", "one","three")

my\_list\_1[[1]] #5.2

my\_list\_1[[as.numeric("1")]] #5.2

my\_list\_1[["1"]] #NULL

my\_list\_1[["one"]] #NULL

my\_list\_1$"one" # "five point two"

my\_list\_1$1 #Error

my\_list\_1$"1" #NULL

#Q13

The lines my\_list\_1$"one" produced "five point two" because we named "five point five" "one" and that action is finding "one"

#Q14

The lines my\_list\_1$"1", my\_list\_1[["1"]], and my\_list\_1[["one"]] all produced the output NULL because the values were not defined.